

**Translation**

**PATENT COOPERATION TREATY**

**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>2003DE001</b>	<b>FOR FURTHER ACTION</b> See Form PCT/IPEA/416	
International application No. <b>PCT/EP2004/003755</b>	International filing date (day/month/year) <b>08.04.2004</b>	Priority date (day/month/year) <b>15.04.2003</b>
International Patent Classification (IPC) or national classification and IPC		
Applicant <b>CLARIANT GMBH</b>		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.	
2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet.	
3. This report is also accompanied by ANNEXES, comprising:	
a. <input checked="" type="checkbox"/> (sent to the applicant and to the International Bureau) a total of <u>1</u> sheets, as follows:	
<input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).	
<input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.	
b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s))	
_____ , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).	
4. This report contains indications relating to the following items:	
<input checked="" type="checkbox"/> Box No. I	Basis of the report
<input type="checkbox"/> Box No. II	Priority
<input type="checkbox"/> Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/> Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/> Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/> Box No. VI	Certain documents cited
<input type="checkbox"/> Box No. VII	Certain defects in the international application
<input type="checkbox"/> Box No. VIII	Certain observations on the international application

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/003755

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
  - ☐ This report is based on translations from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of:
    - ☐ international search (Rule 12.3 and 23.1(b))
    - ☐ publication of the international application (Rule 12.4)
    - ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
  - ☐ the international application as originally filed/furnished
  - ☒ the description:
    - pages 1-8 \_\_\_\_\_ as originally filed/furnished
    - pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
    - pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
  - ☒ the claims:
    - nos. 3-5 \_\_\_\_\_ as originally filed/furnished
    - nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19
    - nos.\* 1 \_\_\_\_\_ received by this Authority on 09.02.2005 with letter
    - nos.\* \_\_\_\_\_ received by this Authority on of 08.02.2005
  - ☐ the drawings:
    - sheets \_\_\_\_\_ as originally filed/furnished
    - sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
    - sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
  - ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
  - ☐ the description, pages \_\_\_\_\_
  - ☐ the claims, nos. \_\_\_\_\_
  - ☐ the drawings, sheets/figs \_\_\_\_\_
  - ☐ the sequence listing (*specify*): \_\_\_\_\_
  - ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
  - ☐ the description, pages \_\_\_\_\_
  - ☐ the claims, nos. \_\_\_\_\_
  - ☐ the drawings, sheets/figs \_\_\_\_\_
  - ☐ the sequence listing (*specify*): \_\_\_\_\_
  - ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

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Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement

## 1. Statement

Novelty (N)

Claims 1, 3-5

YES

Claims \_\_\_\_\_

NO

Inventive step (IS)

Claims 1, 3-5

YES

Claims \_\_\_\_\_

NO

Industrial applicability (IA)

Claims 1, 3-5

YES

Claims \_\_\_\_\_

NO

## 2. Citations and explanations (Rule 70.7)

1. This report makes reference to the following documents:

D1: EP 0 421 303 A (ASICS CORP; ASAHI GLASS CO LTD (JP)), 10 April 1991 (1991-04-10)

D2: DD 246 788 A (ADW DDR INST KOSMOSFORSCHUNG), 17 June 1987 (1987-06-17)

D3: WO 98/12286 A (MINNESOTA MINING & MFG), 26 March 1998 (1998-03-26)

Document D1 was cited by the applicant in the description of the application.

2. Document D1 discloses (the references in parentheses are to that document):

a ski wax which contains partially fluorinated compounds such as  $C_6F_{13}C_2H_4OH$  (page 2, line 51 - page 3, line 2; claims 1 and 2); this corresponds to formula 1 in which  $a=0$ ,  $b=1$ ,  $c=0$ ,  $d=1$ ,  $D=H$  and  $e=0$ .

3. Document D2 discloses (the references in

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Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

parentheses are to that document):

a partially fluorinated lubricant of formula Rf-A, such as  $C_6F_{11}-O-C_6H_5$  (in formula 1,  $a=0$ ,  $b=1$ ,  $c=1$ ,  $d=0$  and  $e=0$ ) and  $H(CF_2CF_2)_4CH_2-O-CH_3$  (claim 1; examples 1, 3, 4 and 11); this corresponds to formula 1 in which  $a=1$ ,  $b=1$ ,  $c=0$ ,  $d=1$  and  $e=0$ .

4. Document D3 discloses (the references in parentheses are to that document):

a partially fluorinated lubricant of formula Rf-O-Rh, such as  $C_3F_7-O-CH_3$ ,  $C_3F_7-O-C_2H_5$ ,  $C_{10}F_{21}-O-CH_3$  and  $C_{10}F_{21}-O-C_2H_5$  (page 2, lines 21-25; page 4, line 19 - page 5, line 8); this corresponds to formula 1 in which  $a=0$ ,  $b=1$ ,  $c=0$ ,  $d=1$ ,  $D=H$  and  $e=0$ .

5. NOVELTY (PCT Article 33(2))

The combination of features in independent claim 1 is unknown from the available prior art.

The subject matter of claim 1 and of dependent claims 3-5 is therefore novel over D1-D3.

6. INVENTIVE STEP (PCT Article 33(3))

Document D1 is regarded as the prior art closest to the subject matter of claim 1.

The subject matter of claim 1 differs from the known partially fluorinated lubricant in that no

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lubricant having the formula 1 in which  $a=1$ ,  $b=0$ ,  $c=1$ ,  $d=1$ ,  $D=H$  and  $e=0$  has been disclosed. The applicant has not demonstrated that the subject matter of independent claim 1 solves a technical problem in a surprising manner in comparison with D1.

The present invention can therefore be considered to address only the problem of providing an alternative partially fluorinated lubricant. No prior art document discloses a partially fluorinated lubricant according to the present claim 1 or suggests such a composition.

Consequently, the solution to the problem should be considered inventive within the meaning of PCT Article 33(3), even if no technical effect is demonstrated. Claims 3-5 thus also meet the PCT inventive step requirements.